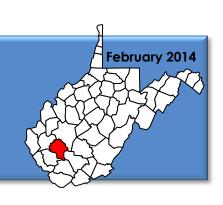
Prepared by the WV Department of Health and Human Resources Bureau for Behavioral Health and Health Facilities

## BOONE COUNTY

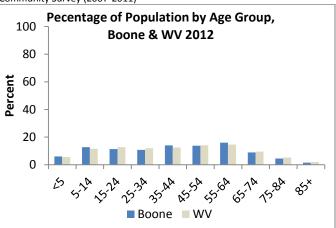


Behavioral Health Epidemiological County Profile

Demographic Data

		Boone	WV
Population		24,478	1,855,413
	White	98.5%	94.0%
Race	Black	0.6%	3.5%
	Other	0.9%	2.5%
Median age		41.1	41.7
Labor force*		47.2%	54.9%
Median household income*		\$41,359	\$39,550
Income below poverty level*		18.9%	17.5%
High school graduate or higher*		72.2%	82.6%
Civilian veterans*		9.9%	11.4%

Source: US Census Bureau, 2012 population estimates, \*American Community Survey (2007-2011)



Population by Age Group 2012				
	Boone		W	<b>/V</b>
Age	#	%	#	%
<5	1,493	6.1%	103,071	5.6%
5-14	3,143	12.8%	214,618	11.6%
15-24	2,793	11.4%	237,491	12.8%
25-34	2,654	10.8%	220,220	11.9%
35-44	3,416	14.0%	232,341	12.5%
45-54	3,372	13.8%	263,998	14.2%
55-64	3,926	16.0%	271,725	14.6%
65-74	2,190	8.9%	176,314	9.5%
75-84	1,119	4.6%	97,902	5.3%
85+	372	1.5%	37,733	2.0%

Source: US Census Bureau, 2012 population estimates

Boone County is located in the southwestern area of West Virginia. According the U.S. Census (2012) Boone County residents constitute 1.3% of the population of the state.

## Adult Behavioral Health Risk Factors: 2007-2011

Indicator	Boone	wv	Rank in WV*
Fair/Poor Health	31.9%	23.6%	9
No Health Insurance (ages 18-64)	19.0%	21.7%	42
No Leisure Time Physical Activity	40.9% <sup>†</sup>	32.1%	5
Obesity	35.2%	31.8%	17
Diabetes	15.2%	11.8%	8
Cardiovascular Disease	16.4%	12.6%	7
<b>Hypertension</b> (2003, 2005, 2007, 2009, 2011)	41.5% <sup>†</sup>	34.6%	10
<b>High Cholesterol</b> (2003, 2005, 2007, 2009, 2011)	43.7%	39.9%	23
<b>Current Asthma</b>	11.8%	8.8%	9
Disability	36.8% <sup>†</sup>	28.4%	9
<b>Arthritis</b> (2005, 2007, 2009-2011)	45.2% <sup>†</sup>	35.2%	4

Source: WV Health Statistics Center, Behavioral Risk Factor Surveillance System.

\*There are 55 counties in West Virginia; 1<sup>st</sup> highest rate and 55<sup>th</sup> lowest rate. Significance: † Indicates county was significant higher than state. †† Indicates state was significant higher than county. § Indicates unreliable prevalence estimate - use caution when reporting and interpreting.

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#### **Alcohol Consumption**

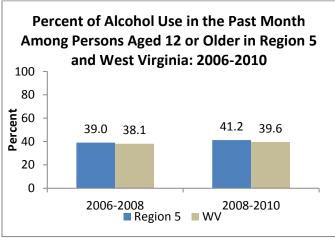
#### **Alcohol Use Among Adults**

Indicator	Boone	wv	Rank in WV*
Binge drinking	7.1%	9.4%	40

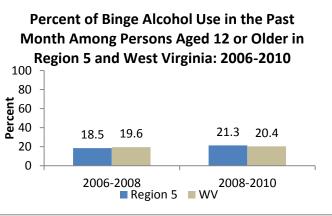
Source: WV Health Statistics Center, Behavioral Risk Factor Surveillance System.

\*There are 55 counties in West Virginia; 1st highest rate and 55th lowest rate. Significance: † Indicates county was significant higher than state. †† Indicates state was significant higher than county. § Indicates unreliable prevalence estimate - use caution when reporting and interpreting.

#### Alcohol Use Among Persons 12 and Older



Source: National Survey on Drug Use and Health (NSDUH) Note: Any use of alcohol in the past month. 2006-2008 & 2008-2011 data was revised March 2012. Region 5 is made up of the following counties: Boone, Jackson, Pleasants, Ritchie, Roane, Tyler, Wirt and Wood



Source: NSDUH

Note: Binge Alcohol Use is defined as drinking five or more drinks on the same occasion (i.e., at the same time or within a couple of hours of each other) on at least 1 day in the past 30 days. 2006-2008 & 2008-2011 data was revised March 2012. See previous definition of Region 5.

#### **Underage Drinking (Those Aged 12-20)**

Alcohol Use in the Past Month Among Persons Aged 12 to 20 in Region 5 and WV: 2006-2010

	2006-2008	2008-2010
Region 5	24.9%	23.5%
West Virginia	25.3%	23.4%

Binge Alcohol Use in the Past Month Among Persons Aged 12 to 20 in Region 5 and WV: 2006-2010

	2006-2008	2008-2010
Region 5	16.4%	15.8%
West Virginia	17.8%	15.9%

Source: NSDUH

Note: See pervious definitions for alcohol use and binge drinking among persons 12 and older. See previous definition of Region 5.

#### Alcohol Risk & Protective Factors

Perceptions of Great Risk of Having Five or More Drinks of an Alcoholic Beverage Once or Twice a Week Among Persons Aged 12 or Older in Region 5 and WV: 2006-2010

	2006-2008	2008-2010
Region 5	42.2%	42.4%
West Virginia	42.0%	43.3%

Alcohol Dependence or Abuse in the Past Year Among Persons Aged 12 or Older in Region 5 and WV: 2006-2010

	2006-2008	2008-2010
Region 5	5.7%	6.3%
West Virginia	6.4%	6.1%

Alcohol Dependence in the Past Year Among Persons Aged 12 or Older in Region 5 and WV: 2006-2010

	2006-2008	2008-2010
Region 5	2.8%	3.2%
West Virginia	3.2%	3.2%

Needing But Not Receiving Treatment for Alcohol Use in the Past Year Among Persons Aged 12 or Older in Region 5 and WV: 2006-2010

	2006-2008	2008-2010
Region 5	5.5%	5.9%
West Virginia	6.0%	5.6%

Source: NSDUH

Note: Dependence or abuse is based on definitions found in the 4th edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV). Needing But Not Receiving Treatment refers to respondents classified as needing treatment for alcohol, but not receiving treatment for an alcohol problem at a specialty facility (i.e., drug and alcohol rehabilitation facilities [inpatient or outpatient], hospitals [inpatient only], and mental health centers). 2006-2008 & 2008-2011 data was revised March 2012. See previous definition of Region 5.

#### **Alcohol Related Consequences**

# 2011 Morbidity Rates per 10,000 Discharges Boone WV Rank in WV Alcohol Related Diagnosis 371.0 407.9 19 Alcohol Dependence 171.9 236.6 34

Source: WV Health Care Authority

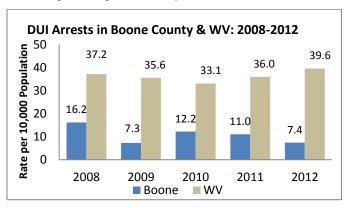
\*There are 55 counties in West Virginia; 1<sup>st</sup> highest rate and 55<sup>th</sup> lowest rate.

#### 2006-2010 Mortality Rates per 100,000 population

	Boone	wv	Rank in WV
Chronic Liver-Cirrhosis	15.3	13.4	15

Source: WV Health Statistics Center, Vital Statistics System

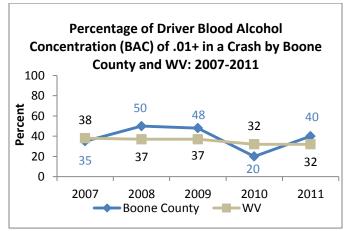
\*There are 55 counties in West Virginia; 1<sup>st</sup> highest rate and 55<sup>th</sup> lowest rate. Significance: † Indicates county was significant higher than state. †† Indicates state was significant higher than county.



DUI Arrests in Boone County and WV: 2008-2012					
	2008	2009	2010	2011	2012
	E	Boone			
Number of DUI arrests	40	18	30	27	18
DUI rate per 10,000 population	16.2	7.3	12.2	11.0	7.4
WV					
Number of DUI arrests	6,842	6,587	6,134	6,680	7,355
DUI rate per 10,000 population	37.2	35.6	33.1	36.0	39.6

Source: WV State Police CIB Section

Note: The DUI arrest data should be interpreted with caution due to the fact that not all law enforcement agencies have reported their DUI arrests (approximately 200 agencies are missing from this dataset).



Source: National Highway Traffic Safety Administration (NHTSA), Fatality Analysis Reporting System (FARS)

Note: NHTSA estimates alcohol involvement when alcohol test results are unknown.  $% \label{eq:condition}%$ 

#### **Tobacco Consumption**

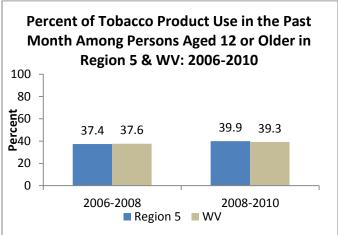
#### **Tobacco Use Among Adults**

Indicator	Boone	wv	Rank in WV*
Cigarette smoking	31.2%	26.9%	10

Source: WV Health Statistics Center, Behavioral Risk Factor Surveillance System.

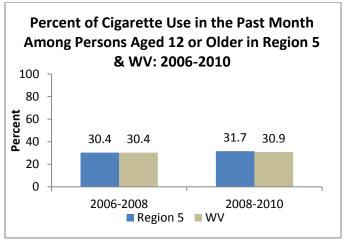
\*There are 55 counties in West Virginia; 1<sup>st</sup> highest rate and 55<sup>th</sup> lowest rate. Significance: † Indicates county was significant higher than state. †† Indicates state was significant higher than county.

#### **Tobacco Use Among Persons 12 and Older**



Source: NSDUH

Note: Tobacco products include cigarettes, smokeless tobacco (i.e., chewing tobacco or snuff), cigars, or pipe tobacco. 2006-2008 & 2008-2011 data was revised March 2012. See previous definition of Region 5.



Source: NSDUH

Note: Any use of cigarettes in the past month. 2006-2008 & 2008-2011 data was revised March 2012. See previous definition of Region 5.

#### Tobacco Risk & Protective Factors

Perceptions of Great Risk of Smoking One or More Packs of Cigarettes Per Day Among Persons Aged 12 or Older in Region 5 & WV: 2006-2010

	2006-2008	2008-2010
Region 5	68.4%	65.2%
West Virginia	68.1%	66.0%

Source: NSDUH

Note: 2006-2008 & 2008-2011 data was revised March 2012. See previous definition of Region 5.



### **Tobacco Consequences**

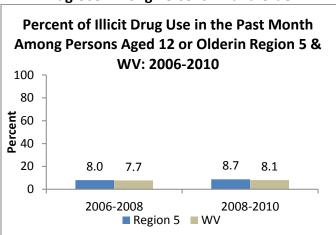
2006-2010 Mortality Rates per 100,000 population				
Boone WV Rank in WV				
Lung/Bronchus/Trachea Cancer	127.0 <sup>†</sup>	83.7	1	
Chronic Obstructive Pulmonary Disease	97.3 <sup>†</sup>	76.7	8	
Cardiovascular Disease	369.0	367.3	38	

Source: WV Health Statistics Center, Vital Statistics System



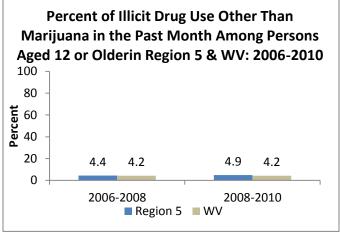
**Drug Consumption** 

#### **Drug Use Among Persons 12 and Older**



Source: NSDUH

Note: Illicit Drugs include marijuana/hashish, cocaine (including crack), heroin, hallucinogens, inhalants, or prescription-type psychotherapeutics used nonmedically, including data from original methamphetamine questions but not including new methamphetamine items added in 2005 and 2006. The 2006-2008 & 2008-2011 data was revised March 2012. See previous definition of Region 5.



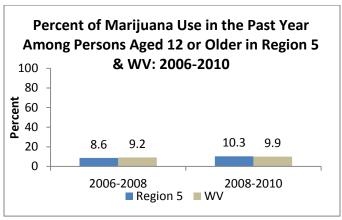
Source: NSDUH

Note: Illicit Drugs Other Than Marijuana includes cocaine (including crack), heroin, hallucinogens, inhalants, or prescription-type psychotherapeutics used nonmedically, including data from original methamphetamine questions but not including new methamphetamine items added in 2005 and

<sup>\*</sup>There are 55 counties in West Virginia; 1<sup>st</sup> highest rate and 55<sup>th</sup> lowest rate. Significance: † Indicates county was significant higher than state. †† Indicates state was significant higher than county.

#### Boone County Behavioral Health Epidemiological Profile

2006. The 2006-2008 & 2008-2011 data was revised March 2012. See previous definition of Region 5.



Source: NSDUH

Note: 2006-2008 & 2008-2011 data was revised March 2012. See previous definition of Region 5.

### Marijuana Use in the Past Month Among Persons Aged 12 or Older in Region 5 and West Virginia: 2006-2010

	2006-2008	2008-2010
Region 5	5.3%	6.1%
West Virginia	5.4%	5.8%

Source: NSDUH

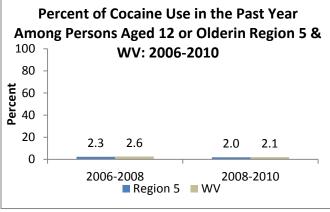
Note 2006-2008 & 2008-2011 data was revised March 2012. See previous definition of Region 5.

## First Use of Marijuana Among Persons Aged 12 or Older in Region 5 and West Virginia: 2006-2010

	2006-2008	2008-2010
Region 5	1.2%	1.3%
West Virginia	1.2%	1.3%

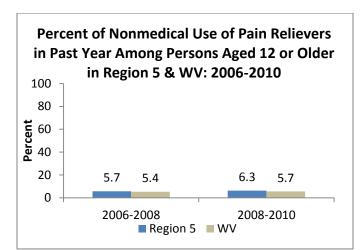
Source: NSDUH

Note: Average annual marijuana initiation rate =  $100 * \{[X1 \div (0.5 * X1 + X2)] \div 2\}$ , where X1 is the number of marijuana initiates in the past 24 months and X2 is the number of persons who never used marijuana. Both of the computation components, X1 and X2, are based on a survey-weighted hierarchical Bayes estimation approach. The age group is based on a respondent's age at the time of the interview, not his or her age at first use. 2006-2008 & 2008-2011 data was revised March 2012. See previous definition of Region 5.



Source: NSDUH

Note: 2006-2008 & 2008-2011 data was revised March 2012. See previous definition of Region 5.



Source: NSDUH

Note: 2006-2008 & 2008-2011 data was revised March 2012. See previous definition of Region 5.

#### Drug Risk & Protective Factors

Perceptions of Great Risk of Smoking Marijuana Once a Month Among Persons Aged 12 or Older in Region 5 &

WV: 2006-2010 2006-2008 200

	2006-2008	2008-2010
Region 5	44.5%	41.2%
West Virginia	44.3%	42.0%

Illicit Drug Dependence or Abuse in the Past Year Among Persons Aged 12 or Older in Region 5 & WV: 2006-2010

	2006-2008	2008-2010
Region 5	3.0%	3.0%
West Virginia	2.9%	2.9%

Illicit Drug Dependence in the Past Year Among Persons Aged 12 or Older in Region 5 & WV: 2006-2010

 2006-2008
 2008-2010

 Region 5
 2.1%
 2.5%

 West Virginia
 2.1%
 2.3%

Needing But Not Receiving Treatment for Illicit Drug Use in the Past Year Among Persons Aged 12 or Older in Region 5 & WV: 2006-2010

	2006-2008	2008-2010
Region 5	2.7%	2.8%
West Virginia	2.6%	2.6%

Source: NSDUH

Note: Illicit Drugs include marijuana/hashish, cocaine (including crack), heroin, hallucinogens, inhalants, or prescription-type psychotherapeutics used nonmedically, including data from original methamphetamine questions but not including new methamphetamine items added in 2005 and 2006. Dependence or abuse is based on definitions found in the 4th edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV). Needing But Not Receiving Treatment refers to respondents classified as needing treatment for illicit drugs, but not receiving treatment for an illicit drug problem at a specialty facility (i.e., drug and alcohol rehabilitation facilities [inpatient or outpatient], hospitals [inpatient only], and mental health centers). 2006-2008 & 2008-2011 data was revised March 2012. See previous definition of Region 5.

#### **Drug Consequences**

#### 2012 Morbidity Rates per 10,000 Discharges

	Boone	wv	Rank in WV
Drug Related Diagnosis	665.2	506.5	5

Source: WV Health Care Authority

## 2006-2010 Mortality Rates per 100,000 population Boone WV Rank in WV Drug Overdose 54.7 26.8 4

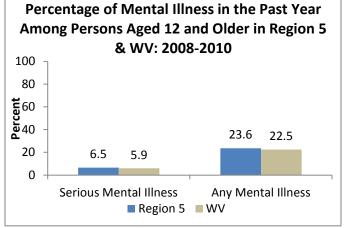
Source: WV Health Statistics Center, Vital Statistics System

\*There are 55 counties in West Virginia; 1<sup>st</sup> highest rate and 55<sup>th</sup> lowest rate. Significance: † Indicates county was significant higher than state. †† Indicates state was significant higher than county.



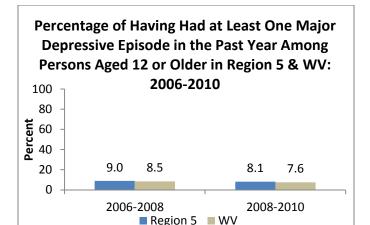
#### Mental Health

#### **Mental Health Among Persons 12 and Older**



Source: NSDUH

Note: 2006-2008 & 2008-2011 data was revised March 2012. See previous definition of Region 5.



Source: NSDUH

Note: 2006-2008 & 2008-2011 data was revised March 2012. See previous definition of Region 5.

#### **Suicide**

Had Serious Thoughts of Suicide in the Past Year Among Persons Aged 12 or Older in Region 5 & WV: 2006-2010

	2008-2010
Region 5	4.0%
West Virginia	4.2%

Source: NSDUH

Note: 2006-2008 & 2008-2011 data was revised March 2012. See previous definition of Region 5.

#### 2006-2010 Mortality Rates per 100,000 population

	Boone	wv	Rank in WV
Suicide	18.5	15.9	21

Source: WV Health Statistics Center, Vital Statistics System

\*There are 55 counties in West Virginia; 1<sup>st</sup> highest rate and 55<sup>th</sup> lowest rate. Significance: † Indicates county was significant higher than state. †† Indicates state was significant higher than county.



<sup>\*</sup>There are 55 counties in West Virginia; 1<sup>st</sup> highest rate and 55<sup>th</sup> lowest rate.

#### Homelessness

### Reported Point-In-Time Sheltered Subpopulations in 2013

	Boone*		WV	
	#	%	#	%
<b>Chronically Homeless</b>	0	0%	250	15.5%
Veterans	0	0%	292	18.1%
Mental Illness	0	0%	422	26.2%
Chronic Substance Abuse	0	0%	538	33.4%
HIV/AIDS	0	0%	17	1.1%
<b>Domestic Violence</b>	0	0%	192	11.9%
Total Sheltered	0		1,612	

### Reported Point-In-Time Unsheltered Subpopulations in 2013

	Boone		WV	
	#	%	#	%
<b>Chronically Homeless</b>	3	75.0%	182	29.0%
Veterans	1	25.0%	37	5.9%
Mental Illness	4	100%	206	32.8%
Chronic Substance Abuse	4	100%	330	52.5%
HIV/AIDS	0	0%	17	2.7%
<b>Domestic Violence</b>	0	0%	122	19.4%
Total Unsheltered	4		628	

Source: WV Coalition to End Homelessness and Kanawha Valley Collective Note: The Point-in-Time Count is conducted during one night in the end of January for a count of all homeless persons. The unsheltered count of the homeless population is likely under reported and should be used with caution. Subpopulation data is not mutually exclusive. Comparing the total is not an accurate representation as one person may have all five characteristics, while some persons may only have one or fewer.

\*There were no shelter facilities in Lincoln County during of the Point-in-Time

\*There were no shelter facilities in Lincoln County during of the Point-in-Time Count.

#### **Domestic Violence**

## Individuals Served by the West Virginia Coalition Against Domestic Violence (WVCADV) by Shelter Status in Boone County in 2012

Shelter Status	Number	
Sheltered	7	
Non-sheltered	214	

## Domestic Violence Survivors Served by WVCADV by Behavioral Health Status in Boone County in 2012

Behavioral Health Status	Number	Percent
Identified as having a mental disability	*	*
Referred to a mental health provider	*	*

## Domestic Violence Abusers Served by WVCADV by Behavioral Health Status in Boone County in 2012

Behavioral Health Status	Number	Percent
Substance abuse identified as contributing to abuse	73	22.5%
Referred to a mental health provider	*	*

Source: WV Coalition Against Domestic Violence Note: All indicators are self-reported from the survivor.

\*Values based on 5 or fewer are suppressed to protect the confidentiality of the person.

#### **Acknowledgements**

The West Virginia Department of Health and Human Resources, Bureau for Behavioral Health and Health Facilities (BBHHF) receives funding from the Substance Abuse and Mental Health Services Administration (SAMHSA) to fund the West Virginia State Epidemiological Outcomes Workgroup (WVSEOW). The focus of the WVSEOW is to provide leadership in the continued development of substance abuse and mental health data and indicators.

The WVSEOW was assembled to lead the statewide systematic process to analyze, translate, and disseminate information about substance use and abuse and mental health in West Virginia.

Additional Resource: West Virginia Behavioral Health Epidemiological Profile, 2013, BBHHF, www.wydhhr.org/bhhf